

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS FO Box 1430 Alexandria, Virginia 22313-1450 www.tepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,968	03/08/2004	Kurt A. Habecker	3600-198-02	8631
7590 07/09/2008 Martha Ann Finnegan, Esq. Cabot Corporation			EXAMINER	
			YANG, JIE	
157 Concord F Billerica, MA			ART UNIT	PAPER NUMBER
,			1793	
			NOTIFICATION DATE	DELIVERY MODE
			07/09/2008	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail  $\,$  address(es):

## Application No. Applicant(s) 10/795,968 HABECKER ET AL. Office Action Summary Examiner Art Unit JIE YANG 1793 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 28 March 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 36-58 and 61-65 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 36-58, 61-65 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Imformation Disclosure Statement(s) (PTC/S5/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

Art Unit: 1793

#### DETAILED ACTION

Claims 36-58 and 61-65 (in the applicants' remarks/argument marked 3/28/2008, the applicants miss the claim 61—Page 5, 2<sup>nd</sup> paragraph) are pending. No amendments to the claims have been made.

### Status of the Precious Rejection

Previous rejections of Claims 36-43, 50-56, 58, 61 and 65 under 35 U.S.C. 102 (b) as anticipated by, or in the alternative under 103 (a) as being unpatentable over Chang (US patent 5,448,447, Hereafter US'447), or in the alternative, under 35 U.S.C. 102(b) as anticipated by '447 as evidenced by He et al (US, 6,786,951 B2, thereafter US'951) are still maintained.

Previous rejections of Claims 48, 49, 57 and 62-64 under 103 (a) as being unpatentable over Chang (US patent 5,448,447, Hereafter US'447) in view of US'951 are still maintained

Previous rejections of Claims 36-47, and 49-58, and 61-65 under 103 (a) as being unpatentable over WO 98/37248 (WO'248) in view of Chang (US patent 5.448.447. Hereafter US'447), and further in view of US'951 are still maintained.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1793

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States

Claims 36-43, 50-56, 58, 61 and 65 are rejected under 35 U.S.C. 102(b) as anticipated by Chang (US patent 5,448,447, Hereafter US'447), or in the alternative, under 35 U.S.C. 102(b) as anticipated by US'447 as evidenced by He et al (US, 6,786,951 B2, thereafter US'951).

US'447, or in the alternative, US'477 in view of US'951 are applied to the claims 36-43, 50-56, 58, 61 and 65 for the same reason as stated in the previous rejection dated 12/28/2007.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 48, 49, 57 and 62-64 are rejected under 35 U.S.C. 103 (a) as being unpatentable over US'447) in view of US'951.

US'447 is applied to the claims 48, 49, 57 and 62-64 for the same reason as state in the previous rejection dated 7/19/2007.

Application/Control Number: 10/795,968
Art Unit: 1793

US'951 is applied to 48, 49, 57 and 62-64 as an new evidence for the same reason as discussed in 102/103 rejections for the independent claim 36.

Claims 36-47, and 49-58, and 61-65 are rejected under 103 (a) as being unpatentable over WO 98/37248 (WO'248) in view of US'447, and further in view of US'951.

WO'248 in view US'447, and further in view of US'951 is applied to the claims 36-47, 49-58, and 61-65 for the same reason as stated in the previous rejection dated 7/19/2007.

### Response to Arguments

Applicant's arguments filed on 3/28/2008 with respect to claims 36-58, and 61-65 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

- 1, the Examiner's evidences for "agglomerated powder" in US'477 (Chang) do not support the Examiner's position. The reference in US'477 (US patent 4,544,403) strictly relates to tantalum-based materials and not at all to niobium. Col.4, lines 1-18 of US'477 does not even relate to niobium at all.
- 2, the prior art He et al (US''951) is not prior art to the present invention and it can not be an inherent prior art either

Application/Control Number: 10/795,968 Art Unit: 1793

because it requires that the characteristic is a "necessary feature or result of a prior-art embodiment" that is sufficiently described and enabled. The Examiner is respectfully requested to identify a particular example in Chang that would permit this conclusion. He et al (US'951) does not show tantalum and niobium powders having similar electrical properties.

#### Responses are as follows:

Regarding argument 1, as pointed out in the rejection for the instant claims as stated above and previous office actions marked 12/28/2007 and 7/19/2007, US'477 clearly teaches the powder may be agglomerated by heat treatment and crushed to a certain particle size (Col. 1, line 61 to Col.2, line 8 and col.4, lines 1-28 of US'447-in the previous office action, the quoted lines is typo error as 1-18). US'477 teaches: "The base materials employed in one embodiment of the present invention were agglomerated by heat treatment while being subject to a vacuum or an inert gas environment. Temperatures in the range of 1200.degree. C. to 1600.degree. C., and preferably in the range of 1400.degree. C. to 1500.degree. C. were used. The heat treatment process may be repeated to achieve a desired degree of agglomeration. Those skilled in the art will recognize the thermal conditions and heating times necessary to achieve a

Application/Control Number: 10/795,968 Art Unit: 1793

desired level of agglomeration of the selected powder." (col.4, lines 19-28 of US'447). US'477 (Chang) discloses that chemical and physical properties of tantalum and niobium are known by those skilled in the art to be sufficiently similar to permit substitution of either metal (Col.3, lines 60-68 of US'477).

Regarding argument 2, the Examiner disagrees with the Applicants' argument. As pointed out in the previous office action marked 12/28/2007, US'951 (He et al) is used as a factual reference (i.e. evidence ref.), it does not need antedate the filling date. MPEP 2124. US' 477 (Chang) teaches: "According to one embodiment of the present invention, capacitor powder for low leakage capacitors is produced from base materials which contain at least one metal powder selected from Group V-B of the Periodic Table. For simplicity purposes, reference shall be made to tantalum metal hereafter even though the chemical and physical properties of tantalum and niobium are known by those skilled in the art to be sufficiently similar to permit substitution of either metal." (Col.3, lines 60-68 of US'951). which clearly support the Examiner's position that US' 477 teaches the niobium powder. As pointed out in the previous office action marked 12/28/2007, US'951 teaches a high surface area tantalum and/or niobium powders via the reduction of the

Art Unit: 1793

corresponding tantalum and/or niobium oxides for electrolytic capacitors application (Abstract of '951). Under the similar treatment conditions (Examples 1-6 of '951), the Ta and Nb powders have shown the similar electrical properties (refer to table 6-7 of '951). See MPEP 2112 I&II. The Applicants' argument does not show unexpected different results between Ta and Nb powders. Therefore, US'447, or in the alternative, US'477 in view of US'951 is applied to the claims 36-43, 50-56, 58, 61 and 65 are proper.

For the same reason, US'447 in view of US'951 is applied to the claims 48, 49, 57 and 62-64 and WO'248 in view US'447 and US'951 is applied to the claims 36-47, 49-58, and 61-65 are proper.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1793

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-270-1884. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JΥ

/Roy King/

Supervisory Patent Examiner, Art Unit 1793